



CENTRE CIRCULAR

NEWS FROM THE PROCESSING DEVELOPMENT DIVISION

JULY 2004

FAREWELL TO LINDA ST. ONGE

After 31 years of dedicated service Linda St. Onge is retiring from her distinguished career at Alberta Agriculture, Food and Rural Development (AAFRD).

Linda joined AAFRD on December 20, 1972 as a home economist in the Home Economics Lab. Linda was promoted to Assistant Food and Nutrition Specialist in October 1975 and to Regional Food and Nutrition Specialist in July 1978.

As a Food and Nutrition Specialist with AAFRD, Linda's principal duties included staff training, preparing and presenting information on various food and nutrition topics and developing resources for training, education and general distribution. The annual three-day food preservation workshops, designed to explore traditional and novel approaches to food preservation with District Home Economists, always brought new adventures, revelations and lots of laughter. Linda also coordinated the Nutrition at School program from 1978 until 1988.

Linda's writing skills proved to be a great asset for the department and many of her publications continue to circulate around the province today. The booklet Nutrition Ins and Outs, reprinted

many times over, has become a principle reference for staff, community groups and consumers throughout Alberta. Linda also co-authored the Explore Nutritious Alberta education reference designed to bring agriculture, food and nutrition to life for elementary school children.

In 1996, Linda moved to the AAFRD Food Processing Development Centre (FPDC) in Leduc. Capitalizing on her food science background and her organizational skills Linda took on responsibilities in the areas of sensory evaluation and product development.

Linda's retirement party was on May 28, 2004 at the FPDC. It was well attended by many AAFRD staff, both current and retired; the local paramedics even stopped by to give her a pre-retirement health check.

Linda plans on

keeping extremely busy in her retirement. She has taken up golf in addition to her home renovations, weekly bridge games, theatre adventures, spending time with her grandchildren and of course her violin lessons.

We at AAFRD will miss Linda's great sense of humour, fun stories and excellent work.



Linda cutting the cake at her retirement party.

Agrivalue Processing Business Incubator Project

Background

Since the opening of the Food Processing Development Centre (FPDC) in 1984, there has been a continuous increase in usage at the facility. Clients have had a great deal of success undertaking product and process development, pilot plant process scale up and product commercialization, as a result the FPDC has experienced considerable pressure on its capacity. Additionally, these clients have difficulties securing suitable facilities to manufacture commercial products. To address these needs, the FPDC began providing interim processing for clients.

What is an Incubator?

According to the National Business Incubation Association business incubation is "a program designed to accelerate the success of young companies through an array of services and resources customized by on-site staff to the needs of clients with the goal of graduating firms out of the incubator and into the community." Typically 80 percent of firms that do not evolve through business incubators fail within five years. Conversely, 80 percent of firms that advance through a business incubator are still in existence after five years

Why in Alberta?

By developing an agrivalue processing business incubator, Alberta will increase the food processing capacity in the province, increase the number and success rate of new food processing companies, attract established food industry participants to Alberta and introduce new food processing technologies. Establishing an incubator will assist food processors through the evolution from developmental activities to commercial production in independent facilities. Thus allow the FPDC to concentrate on the investigative and developmental role for which it was designed.

The Agrivalue Processing Business Incubator

Alberta Agriculture, Food and Rural Development (AAFRD) and AVAC Ltd. sponsored two studies investigating the feasibility of establishing a food processing incubator adjacent to the FPDC. Upon completion of the studies, senior management of AAFRD and the AVAC Ltd. board agreed to participate in the development of an agrivalue processing business incubator. The projected cost for construction of the building is targeted at \$18 million with a completion date of August 2005.

There will be eight individual, self contained, food processing bays that will share common: dry storage, refrigerated storage, frozen storage, shipping/receiving, administrative and staff welfare areas. The incubator's utilities will be supplied from a central mechanical area. This will all be housed in a 6,870m² addition to the existing 3330m² FPDC. The entire facility will operate under Canadian Food Inspection Agency inspection and will be a registered facility under both the *Meat Inspection Act* and various regulations of the *Canada Agricultural Products Act*.

The diverse client base is expected to provide a climate where processing companies share their experiences, learning opportunities and successes. Incubator management will provide tenants with linkage to programs, services and organizations which help foster client success. Alberta Infrastructure will maintain the building and provide basic utilities and, on a cost recovery basis, installation and maintenance of client equipment.

Consumer Product Testing Centre Open House

On May 14th, the Processing Development Division hosted an Open House to display the new Consumer Product Testing Centre in downtown Edmonton. Deputy Minister Brian Manning and Assistant Deputy Minister Brian Rhiness, plus representatives from the University of Alberta, the Federal Ministry of Agriculture and other Alberta Government programs attended the event. Ron Pettitt (Director of the Processing Development Division) and Karen Erin (Branch Head, Programs and Manager, Sensory Evaluation Program) spoke to the assembled crowd. Attendees were given guided tours of the new facility, and participated in mock consumer sensory evaluations, designed to show off the capabilities of the computerized system and the risk management component of consumer sensory evaluation.



Attendees participating in mock consumer evaluations

NEW TO THE DIVISION

George Pan, Material Scientist
B.S. in Chemical Engineering, Nanjing Forestry University, China
M.S. in Wood Chemistry, Nanjing Forestry University, China
Ph.D. in Process Chemistry, National Polytechnic Institute-Grenoble, France

Dr. Pan joined the Centre for Agri-Industrial Technology (CAIT) as a Material Scientist-Agricultural Fibres in March of 2004. Prior to joining CAIT, Dr. Pan spent seven years as a Research Scientist/Program Leader with the Alberta Research Council. Previous employment also included one year as a Research Associate at the Pulp and Paper Research Institute of Canada, four years as an Assistant Scientist at the Institute of Paper Science and Technology of the Georgia Institute of Technology, and six months as a Graduate Researcher at the Paris-Grignon Centre of the National Institute of Agricultural Research in France.

Dr. Pan's main areas of interest are wood and fibre chemistry, oxidative chemistry, chemical and biological processing of natural fibres, fractionation and characterization of plant polymers (such as lignin and polysaccharides), and technologies of converting agri-fibres and crop residues into value-added feedstock for industrial applications in biocomposites, paper, polymers and chemicals.

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George Pan

Jana Robertson, Food Scientist
Food Science and Technology Centre, Brooks
B.Sc. Food Science, University of Saskatchewan, 1996
Professional Agrologist, 2004

Jana joined the staff at the Food Science and Technology Centre in Brooks on April 5, 2004. Prior to joining the Centre, Jana spent seven years working at Harimex Inc. in various roles (Lab Technologist, HACCP Coordinator, Quality Assurance Manager and Trainer). Jana's involvement in numerous activities was a direct result of the company's small size, it provided excellent opportunities to learn.

Jana also worked at Beatrice Foods Inc. in Calgary as a lab technician for five months before joining Harimex Inc. Before that, Jana was hired at the U of S in the Applied Microbiology and Food Science department as a summer student (four months) and then in the Crop Science department for about a month.

Jana has experience in the food processing industry and will bring that knowledge to her current position. Jana will be working with clients in the food processing industry in Southern Alberta, performing product and process development, which includes microbiological and chemical analyses.

To contact Jana phone, 403-362-1321 or email, jana.robertson@gov.ab.ca



Jana Robertson



SCIENTIST PROFILE: DR. DAVID BRESSLER

In September 2003, Dr. David Bressler joined the Centre for Agri-Industrial Technology (CAIT) and the Department of Agricultural, Food and Nutritional Sciences at the University of Alberta (U of A) as a cross-appointed assistant professor. This unique position is expected to greatly increase communication and collaboration between the AAFRD and the U of A. Dr. Bressler will generate new processes and technologies at the University that can then be directly transferred to CAIT for further development including scale-up and commercialization. Dr. Bressler serves as a resource for CAIT and the agri-industrial community in the areas of bioproducts, bioprocessing, and bioengineering.

The research at the university directed by Dr. Bressler focuses on developing agricultural biocatalytic technologies, or use of microorganisms as a processing tool for the conversion of low value agricultural feedstocks and waste materials to high value commodities. The research involves aspects from the fields of microbiology, biotechnology, chemical engineering, and separation chemistry. One example of a project currently under research at the U of A is the thermal and biochemical conversion of tallow and other agricultural fats and oils to value added chemicals and fuels. Positive outcomes of this research are expected to help develop new industrial markets for waste materials from the animal processing industries that have lost much of their value and many traditional markets due to the recent out-break of BSE (Bovine

Spongiform Encephalopathy). A second area of investigation is the production of the valuable essential fatty acid *gamma*-linolenic acid through the fermentation of a fungal species grown on waste materials from the cheese making industry.



David Bressler

Dr. Bressler is currently in the process of establishing and developing research activities that are new to the University of Alberta and is in the process of recruiting new graduate students for training in these cutting edge areas of research.

Did You Know?

In Alberta pasteurizer operators must be licensed to operate a pasteurizer. In order to facilitate this requirement, the Food Processing Development Centre (FPDC) and the Alberta Dairy Council conducts a Pasteurizer Operators licensing course. The four-day program includes hands-on activities, discussions and lectures on regulations, cleaning and sanitation, pasteurization, and other operational procedures in milk plants. One day is spent in the pilot plant at the FPDC using the HTST system to see what occurs and understand why. This year's course had 18 participants from the dairy industry including: Bles-Wold Dairy Ltd., Confetti Ice Cream Factory, Lucerne Foods Ltd. (A Div. of Canada Safeway), Saputo Foods and Parmalat Canada.



Pasteurizer Operators licensing course participants